

## Chapter 13

# Traffic Sampling and Forwarding Overview

Traffic sampling allows you to sample IP traffic based on particular input interfaces and various fields in the packet header. You can also use traffic sampling to monitor any combination of specific logical interfaces, specific protocols on one or more interfaces, a range of addresses on a logical interface, or individual IP addresses. Information about the sampled packets is saved to files on the router's hard disk.

The forwarding policies allow you to configure the per-flow load balancing, port mirroring, and Domain Name System (DNS) or Trivial File Transfer Protocol (TFTP) forwarding.

Traffic sampling and forwarding are supported only on routing platforms equipped with an Internet Processor II application-specific integrated circuit (ASIC). To determine whether a routing platform has an Internet Processor II ASIC, use the `show chassis hardware` command.

Traffic sampling is not meant to capture all packets received by a router. We do not recommend excessive sampling (a rate greater than 1/1000 packets), because it can increase the load on your processor. If you need to set a higher sampling rate to diagnose a particular problem or type of traffic received, we recommend that you revert to a lower sampling rate after you discover the problem or troublesome traffic.

